

REASONS FOR PRE-APPEAL BRIEF REQUEST FOR REVIEW

Applicants' sole independent claim, claim 22, recites, among other limitations:

A method for reducing the latency time for interactive data communication **between a server computer and a client computer** via a telecommunication network, in particular via a satellite network comprising a geostationary satellite, ... [emphasis added by Applicants]

The body of Applicants' independent claim further references the **client/server relationship** between the computers of Applicants' claimed invention, reciting, among other limitations:

... wherein a data processing application, in particular a database application, **runs on the server** and generates screen displays of an interactive user application with several data fields that are processed one after the other in a processing sequence in line with predetermined parameters based on commands and data entered via an input medium connected to the client computer **and are then transferred to the client computer** in the form of data packets without acknowledgment of receipt **and displayed by this client computer** on a display medium,

As such, Applicants' claims clearly require, among other limitations, a data processing system having a **client – server relationship** (i.e., wherein screen displays generated on the server are transferred to the client computer for display).

However, the prior art cited against Applicants' independent claim 22 in the Office Action does not teach or suggest Applicants' particularly claimed invention running in a client – server data processing system. Rather the **HALS** reference (USP 6,920,505), alleged in the Office Action to show "the invention substantially as claimed", does not teach or suggest, among other limitations of Applicants' claims, a **client – server computer system**. Rather, **HALS** discloses a method and

apparatus for determining a navigation path for a visitor to a world wide web store.

As such, in **HALS**, the visitor's computer and the store's computer do not have a client – server relationship, but rather, they interact through HTML-based transfer techniques used for transferring web sites in the Internet. See, for example, col. 1 of **HALS**, lines 7 – 14. However, "client – server based computing" is substantially, and fundamentally, different from "HTML-based transfer techniques".

In particular, the most essential difference between HTML technology and client/server-based computing is that, in client/server-based computing, an interactive application, such as for example, a database application, **runs entirely self-sufficiently on the server computer** designated hereinafter as "application server". In the invention of Applicants' claim 22, the interactive application is executed independently on the application server to generate screen displays of an interactive application program, for example, a database input mask, in which various fields must be filled out, is also generated on the application server. The display generated by the application server is then transferred via a highly latent connection, for example a geostationary satellite connection, to the client computer, which, does not execute the application per se, but merely reproduces the screen displays generated by the application server on the screen of the client computer. In this case, **the client computer merely functions as a "dumb" terminal**, whereas the application server performs the actual computing work, which, naturally, occurs with a clearly higher speed than could be executed by a simple client computer.

In order to react to an input mask computed by the application server and transferred to the client as a screen display by inputting letters or numbers, an independent

program routine takes place on the client computer as specified in claim 22 as well as in the dependent claims. Expressed in simple terms, this independent program routine merely computes the movement of the cursor in the mask illustrated on the screen of the client computer and ensures that, for example, after the input of letters and a final command the latter are sent back in the form of further data packets to the application server. The latter, by means of the input commands and the newly entered data, executes, for example, a new sorting of the database.

As is typical in client-server computer systems, the connection between the client computer and the application server **is always maintained**, since the application program is, so to speak, **remotely controlled on the application server via the client computer and the highly latent network connection**.

Contrary thereto, in the case of the **HTML technology** of the Internet, a web server is accessed using a web browser installed on a local computer, via a network connection, by inputting a desired Internet address, for example, the page of an airline company, where an air journey is to be booked. A plurality of preset HTML pages generated beforehand is deposited on the web server. The web server can be connected admittedly also with the database server, which manages the individual flight data, for example.

After selecting the corresponding web page, where, for example, the desired flight connections are listed, the web server sends the page contents in form of HTML code back, wherein, if applicable, also further independent program routines like Java scripts or the like can be contained, for example.

The source code sent to the local computer from the web server, via the network connection, is subsequently interpreted by the browser running on the local computer, and is converted into a screen display of the requested web page. Although fields in the HTML illustration can admittedly be generated from the Java scripts or Applets, which fields, without more detailed knowledge of the display technology, create the impression for the layman as if an interactive application, for example, a flight booking system completely runs on the server and is only displayed on the local computer, this is not really the case.

Rather, in reality, the connection between the local computer and the web server is interrupted after sending an entire HTML page. After the input of data into a data field of the displayed browser mask and clicking or inputting the "enter" command, this input mask is then interpreted by the browser running on the local computer, and sent again to the web server. The web server then deposits the HTML code of the requested web page from its internal database and sends it in the above-described manner again to the local computer. The browser of local computer interprets it and displays it on the screen of the client computer. After that, the connection is again interrupted.

Applicants want to emphasize once more at this point that, because of the system, HTML-based technology in reality does not render possible the operation of a pseudo-interactive application, such as for example a flight booking system, via a highly latent network. This is due to the fact that a latency period of, for example, 0.5 seconds by the return confirmations that are absolutely required for the transfer of

HTML code, requires several minutes for each side without further measures even if several thousand data packets are combined in merely one large TCP-IP data packet prior to the transfer. It is understood that, in practice, one cannot speak of an interactive application if the wait period is several minutes after each input.

With regard to the teachings in **HALS**, **AHERN**, and **HIND** references (cited in the Office Action), Applicants note that they all pertain **to the exchange of HTML pages** so that even in combination, they could not suggest the invention as defined by claim 22.

Applicants believe that one of ordinary skill in the art would not even consider the data processing technologies described in these references because they are exclusively based on the transfer of HTML code, which, as explained above, excludes operation suitable in practice due to the substantial delay. Since these three references all pertain to the exchange of HTML pages, one of ordinary skill in the art would not consider these references in connection with the acceleration of an interactive application program on an application server of a client-server system, in which the program is executed **via a highly latent network connection**. As such, as can be seen from the foregoing, the cited prior art discloses a system that interacts through HTML transfer techniques, wherein processing of displays occurs on the web server and in the browser of the local computer, which communicate intermittently. This is in direct contrast to client – server based computing systems, such as the system claimed by Applicants.

Applicants claims are, therefore, believed to be patentable over the cited art.